

RF AMPLIFIER

Available as: QBH-8720, Hybrid SM (E52-19422)

MODEL QBH-8720

Features

- High Gain: 24.5 dB Typical
- High Power: +23 dBm Typical
- Operating Temp. -40 °C to +70 °C
- Environmental Screening Available

Specifications

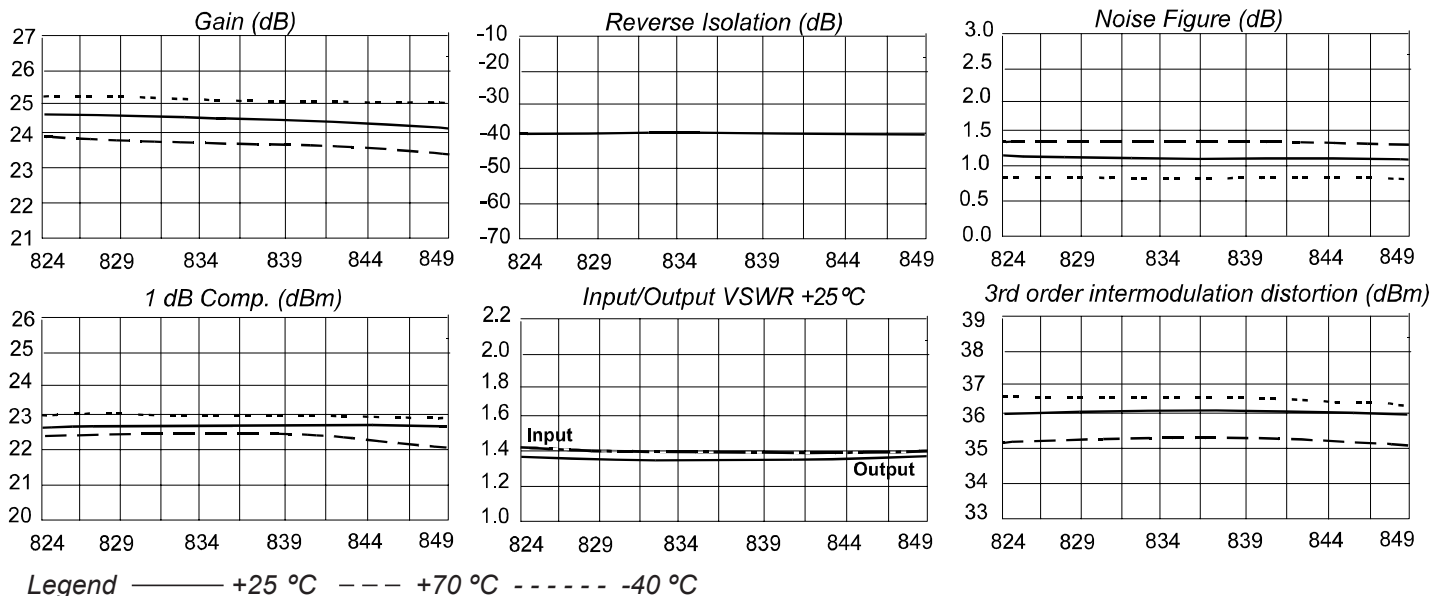
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -40 °C to +70 °C
Frequency	824 - 849 MHz	824 - 849 MHz
Gain (dB)	24.5	—
Gain vs. Temperature	—	+2.0 Max.
Gain Flatness	0.4	0.6 Max.
Reverse Isolation (dB)	-40	-36 Min.
VSWR In	1.4:1	2.0:1 Max.
VSWR Out	1.4:1	2.0:1 Max.
1 dB Compression (dBm)	+23	+21 Min.
Output Intercept Point 3rd Order	+36	+33 Min.
2nd Order	—	—
Noise Figure (dB)	1.2	1.7 Max.
Power Vdc	+15	+15
mA	140	175 Max.

Absolute Maximum (No Damage) Ratings

Ambient Operating Temperature	-55 °C to +125 °C
Storage Temperature	-65 °C to +150 °C
Case Temperature	+125 °C
DC Voltage	+17 Volts
Continuous RF Input Power	+13 dBm
Short Term RF Input Power	50 Milliwatts (1 Minute Max.)
Maximum Peak Power	0.5 Watt (3 µsec Max.)

Note: Specifications are guaranteed when tested in a 50 Ohm system.
Specifications indicated as typical are not guaranteed.

Typical Performance Data



Linear S-Parameters Data

FREQ. MHz	-- S11-- dB Ang	-- S21-- dB Ang	-- S12-- dB Ang	-- S22-- dB Ang
825	-15.3 136.5	24.6 165.6	-40.8 46.4	-16.8 51.0
830	-15.4 131.8	24.5 163.9	-40.6 46.8	-16.7 48.7
835	-15.5 126.4	24.4 162.2	-40.7 48.7	-16.6 46.6
840	-15.5 121.1	24.3 160.6	-40.8 47.3	-16.5 44.5
845	-15.4 115.8	24.3 158.8	-40.7 44.6	-16.4 42.4



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